DOCUMENT RESUME

ED 236 576 CS 007 366

AUTHOR Kazemek, Francis E.
TITLE An Examination of the Adult Performance Level Project and Its Effects upon Adult Literacy Education in the United States.
PUB DATE [83]
NOTE 26p.
PUB TYPE Viewpoints (120)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Adult Basic Education; *Adult Literacy; Competency Based Education; *Functional Literacy; *Literacy Education; Research Methodology; *Research Problems; *Test Bias; Test Reviews; Test Validity
IDENTIFIERS *Adult Performance Level

ABSTRACT

The Adult Performance Level (APL) project, which developed and validated a series of objectives for adult functional competency free from school-based notions of literacy, is the most widely accepted approach to adult literacy and adult literacy education in the United States today. Yet a review of the project and its impact reveals that the APL criteria and their resulting objectives, instructional strategies, and programs are insupportable by empirical evidence and detrimental to both individuals and society. The APL's assertion that researchers were able to specify what all groups or subcultures in the United States must be able to do to be labelled functionally competent is suspect. Researchers' norms do not necessarily reflect the goals, needs, skills, and aspirations of adults rejecting traditional middle-class goals. In addition, by ignoring the moral and ethical aspects of adult literacy in their effort to describe a value-neutral situation, the APL project authors actually prescribe a form of literacy education that perpetuates the status quo. Finally, if the APL project is a form of persuasive discourse, it cannot discuss adult literacy from a position of science and research. The APL project has failed to consider all the available facts concerning the complex nature of adult functional competency. (HOD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED236576

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Francis E. Kazemek

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

An Examination of the Adult Performance Level Project and Its Effects Upon Adult Literacy Education in the United States

Francis E. Kazemek
Department of Education
Eastern Washington University
Cheney, WA 99004

CS 007366

Introduction: The Adult Performance Level Project

The Adult Performance Level Project (APL) was commissioned by the U.S. Office of Education in the early 1970's. The purpose of the project was to determine and establish standards of functional competency which are free of school-based notions of literacy:

> The central objectives of the Adult Performance Level (APL) project are to specify the competencies which are functional to economic and educational success in today's society and to develop devices for assessing those competencies of the adult population of the United States. (Northcutt, 1975, p.1)

The competencies were established through four simultaneous lines of research: 1) a review of the literature and research; 2) a survey of state and federal agencies; 3) a series of conferences on adult needs involving adult educators, personnel managers, state and federal bureaucrats from different educational agencies, and others; 4) a series of interviews with "undereducated and underemployed persons."

These four lines of research resulted in a general theory of adult functional competency which includes four aspects: 1) the concept of functional competency is not a single skill or a related set of skills; rather, it is two-dimensional and involves the application of a set of skills (reading, writing, speaking/listening, computing, and problem solving) to a set of knowledge areas (consumer economics, occupational knowledge, health, community resources, and government and law); 3) adult competency involves not only individual abilities but also the requirements of society at a given time; if the demands of a society change, then the requirements for functional competency also change. As the APL authors

maintain, "Functional competence is a dynamic process, rather than a static state" (Northcutt, 1975, p. 3); 4) "Functional competency is directly related in a mathematical sense to success in adult life. This is an operating assumption which underlies all APL research activities" (Northcutt, 1975, p. 3).

Functional competency according to the above guidelines is based upon three criteria: level of education; level of income; and status of occupation. Based upon these criteria, three levels or categories were established: APL 1--adults who function with difficulty; APL 2--functional adults who are not proficient; APL 3--proficient adults. Thus, according to these criteria, a janitor with seven years of education and a yearly income of $8,000 is placed in APL 1 category while a medical doctor with a yearly income of $75,000 is placed in APL 3 category. According to these guidelines, 34 million adults are placed in APL 1, function with difficulty, and 39 million more are placed in APL 2, functional but not proficient. Thus, approximately one-third of the population is, in some sense or another, incompetent.

Northcutt et al., present a four point argument for the validity of their data: 1) "The objectives derive from inputs from the appropriate segments of society." 2) The "performance indicators" were, within "budgetary and time constraints, the best possible measures of the objectives." 3) A national sample of 7,500 adults was used. 4) "Perhaps the most important kind of 'validity' is the acceptance and degree of use to which the objectives and test data will be put. Preliminary evidence indicates that, at least among the adult education community, there will be widespread acceptance and utilization" (Northcutt, 1975, p.10). I will look briefly at each of these points in turn.

1) The objectives, or specification of competencies, were developed after considering the input from: a) state and federal agencies and foundations; "interviews were conducted with 49 individuals from 25 different state and federal agencies during the initial phase" (Northcutt, 1975, p.1); b) the regional conferences on adult needs which included adult educators, members of state and federal agencies, and members of the private sector; c) the semi-structured interviews with undereducated and underemployed adults; d) the review of related literature and research.

2) The "performance indicators" were "small simulations of what is demanded of the adult by his or her society ..." (Northcutt, 1975, p. 4). The performance indicators were field tested with 3,500 adults who were enrolled in Adult Basic Education (ABE) programs in 30 states. These indicators went through several cycles of field testing and were reviewed by consultants, undereducated and underemployed adults, employers, educators, and various social service agencies which deal with "unsuccessful" adults. "The indicators are clearly not perfect in an absolute sense. It is impossible to obtain absolute consensus or to produce perfect correlation on any indicator" (Northcutt, 1975, p. 9).

3) For the national assessment, the performance indicators were "formatted into a series of interview schedules" (Northcutt, 1975, p. 4). Five independent samples were then drawn, for a total of 7,500 adults, and the national survey conducted.

4) The validity of the findings from the national survey is not only based upon the fact that there are statewide efforts to use the APL objectives

and test data and wide acceptance by adult literacy educators, but also upon the fact that sample "design and field procedures were carried out according to specifications by an organization which has years of experience in drawing national samples and in conducting house-to-house surveys" (Northcutt, 1975, p. 10). Moreover, the APL authors discuss the reliability of their measures. They maintain that reliability "is a function not only of the format and content of the interview itself, but of the sampling design and field procedures" (Northcutt, 1975, p. 10). They did not use a test-retest design to determine reliability because: 1) reliability coefficients are based on total scores, and total scores were not calculated in determining competency from the APL data; 2) "A test-retest design for a national sample would have cost at least $100,000. This was money which was better spent on development and validation of objectives" (Northcutt, 1975, p. 10). Instead, the APL authors used the results of an independent sample drawn by the State of Texas to determine, in part, the reliability of the national sample. The Texas data replicated the national data, and the results were "remarkably consistent with national trends" (Northcutt, 1975, p. 11). In addition, an item-by-item analysis was made of the 39 items which were not changed between the earlier surveys and the final survey.

To summarize, the APL project accomplished the following:

1. Developed and validated a series of objectives which comprise adult functional competency.
2. Conducted a series of national assessments of performance of adults with respect to these objectives.
3. Created, as a by-product of the research, a prototype test of adult functional competency. (Northcutt, 1975, p. 12)

According to the APL findings, 16% of Whites are estimated to be in APL 1 category, but 44% of Black and 56% of Spanish-surnamed people are in APL 1--function with difficulty. On the other hand, 50% of Whites are in APL 3, but only 17% of Blacks and 18% of Spanish-surnamed people are in APL 3--proficient adults.

Tha national dissemination and wide-spread acceptance by educators of the APL definition of functional competency make it undoubtedly the most important approach to adult literacy and adult literacy education in the United States today (Cranney, 1983a; National Diffusion Network Division, Department of Education, 1981; Watkins, 1982). Even Hunter and Harman (1979), the most careful (in the traditional sense of scientific inquiry) and most objective scholars in adult literacy refer to the APL findings--even though they disagree with some of the major assumptions underlying APL and with the methodology used to arrive at the 65 objectives that determine functional competency. And even Jonathan Kozol (1980), a person one expects to look through a screen of statistics to find the reality behind, a critic one expects to attack, not to accept, a definition of adult competency based on income and occupation--so obviously a measure of class, not competency--even Kozol accepts, however indirectly, the APL findings. Moreover, almost without exception, when the popular media and public officials speak of functional illiteracy or cite the problem of illiteracy in the United States, they use the APL statistics (Welborn, 1982). For example, when the present U.S. Secretary of Education told a House subcommittee that there are 73 million people who function at a marginal level or below, he was quite clearly using the APL findings for categories 1 and 2 (Hernon, 1983).

What is one to make of these findings and of the powerful effect of APL upon the field of adult literacy? What is one to make of the APL guidelines for determining competency and the following assertion?

> It is surprising, perhaps even shocking, to suggest that approximately one of five Americans is incompetent or functions with difficulty and that about half of the adult population is merely functional and not at all proficient in necessary skills and knowledge. (Northcutt, 1975, p. 12)

The notion that an adult must be able to read and write well enough to function adequately in society is certainly reasonable enough, and the kind of commonsensical assertion that many people, both the general public and the educational community, unquestioningly accept as valid. Shouldn't a functionally competent person be able to meet such APL objectives as the following?

> To prepare for job applications and interviews;
>
> To understand the concepts of sales tax and income tax;
>
> To understand the importance of family planning ... and to have knowledge of both effective and ineffective methods of birth control;
>
> To explore the relationship between government services and the American tax system;
>
> To learn the use of maps relating to travel needs. (Northcutt, 1975, unpaginated).

Clearly, the APL conception of functional competency is not a narrow school-based notion. Likewise, it is not static but changes as society does. It appears to relate to specific skills and knowledge that adults seem to need to survive in today's society. Is it not, therefore, an improvement over older school-based notions of literacy? Is it not a generally acceptable construct of adult functional competency? I maintain that it is not. In fact, the actual effects of the APL project, both short and long-term, may cause more

harm to more people than any grade-level classification ever did. In the following discussion, I want to explore why I believe that the APL criteria and the objectives that follow from them, and the instructional strategies and programs that follow from the objectives, are: first, unsupportable by any empirical evidence; and, second, detrimental to both individuals and society as well. In order to support my contention that the APL criteria and objectives are invalid and potentially harmful, I will cite the arguments of others and conclude with my own critique which is based on a distinction between aims of discourse made by Kinneavy (1971).

Methodological Problems with the APL Project

First, I will examine the notion of functional competency as a national standard; second, I will examine the assumptions and methods of APL data collection and analysis.

Levine (1982) argues quite forcefully that the very notion of "functional literacy" is in fact a "tangle of flawed assumptions and ambiguities"; he maintains that "this conceptual history shows clearly that the core idea of functional literacy developed in a political and diplomatic arena" (Levine, 1982, p. 256). Functionality, Levine contends like Gray (1956) before him, is only meaningful in specific social contexts. There exists no empirical criterion for establishing standards of functional literacy for society as a whole; rather, functional literacy "seems to require a preexisting notion of functionality" (Levine, 1982, p. 260).

Kirsch and Guthrie (1977-78) make similar points to Levine's concerning functional literacy, though not as strongly polemical. They examine the literature that pertains to the measurement of functional literacy and find a

lack of agreement as to what functional literacy is and a concomitant lack of agreement as to what should be measured: "... the measures of functional literacy reviewed here seem inadequate in their present form" (Kirsch & Guthrie, 1977-78, p. 505). The authors suggest that new measures should be developed which distinguish between the concepts of functional literacy and functional competency.

> It would seem prudent to use the term literacy to refer to reading and cognitive competency to refer to general skills in listening, reading, writing, and calculating. Affective characteristics, such as motivation, perseverance, and dependability, that seem to be needed for job performance, should not be confused with literacy or cognitive competency. Functional literacy refers to how well a person can read materials associated with "survival" activities. (Kirsch & Guthrie, 1977-78, p. 505)

The APL project, however, does confuse functional competency with cognitive competency; moreover, it confuses affective characteristics with literacy and cognitive competency. For example, consider such objectives as: "To understand the importance of family planning ..."; "To understand what contributes to good mental and physical health and to apply this understanding toward preventive care and health maintenance" (Northcutt, 1975, unpaginated/ emphasis added).

Cervero (1980) reanalyzed the original data upon which the APL criteria for functional competency are based. He found that the APL measure of competency is circular. After deciding, for example, that a wealthy lawyer is more functionally competent than a poor day-laborer, the APL authors selected some characteristics of each, assumed that those were the causes of the differences between the lawyer and the day-laborer, and then established those characteristics as the criteria for success and functional competency.

Thus, correlations were assumed to be causes, a misuse of statistics which every student in a beginning statistics class is warned against. More, I believe that the existence of those characteristics, and their correlations with people in certain occupations and with certain incomes is itself an assumption. I don't think Northcutt and the other APL researchers found that the doctor making $75,000 a year did her own taxes or read through her own rental lease or insurance policy. I think Northcutt et al. simply assumed that she could, would, and did. If I'm right, assigning th competencies to APL levels 1, 2, and 3 was just that, an assignment and not a discovery of correlations. That is, and this point cannot be highlighted strongly enough, the APL researchers field tested the "performance indicators" with 3,500 adults in ABE programs, with "undereducated and underemployed adults." They did not field test them with doctors, lawyers, teachers, small businessmen, managers, electricians, welders, grocery clerks, insurance saleswomen, and so forth. They simply assumed that these people could do things like read rental leases, maps, and job applications and use catalogs, consumer guides, airline schedules, and so forth.

Cervero (1980) argues that the APL test does not measure functional competency because the APL indices of success are inappropriate or, at best, indirect evidence of the success of the individuals upon which the test is based. Moreover, he continues, it is not logically possible to define a universe of behaviors that determines various competencies without respect to a value position, which is what the APL authors attempt to do. Cervero concludes that the APL test does measure verbal ability, writing, and computation--the "3Rs." Ultimately, it does not deal with skills that are not currently taught in regular ABE programs.

In a related study, Cervero (1981) compared the APL test and the GED (high school equivalency) exam. He found that both tests are primarily measures of reading ability and that they give very little information on the student's abilities--other than reading--in the APL knowledge and skill areas.

Griffith and Cervero (1977) similarly argue that there is no evidence that the APL criteria for competency are related to effective functioning and success in adult life. Moreover, they contend that the APL project is not value-neutral as it claims to be; it does in fact accept and propagate the status quo. Acland (1976) likewise maintains that the APL study is faulty on two grounds: 1) all people do not face the same real-world problems; therefore, establishing a set of objectives which presumably all "successful" people must meet is inappropriate; 2) there are a variety of ways of solving problems and coping in life; the APL objectives attempt to legitimize one way. Ultimately, Acland says, surveys like APL do not take into account the actual uses of written materials in everyday life.

I will now examine the assumptions and methods of data collection and analysis upon which the APL levels of competency and statistics are based. The four point argument which the APL authors present for the validity of their data is indeed a weak one. As I discussed, this argument is based on: 1) the fact that the objectives were based on inputs from representative segments of society; 2) the "performance indicators" were field tested and are, within time and monetary limits, the best possible measures of the objectives; 3) the national assessment of performance levels with regard to the objectives was based on a sample of 7,500 from the continental United States; 4) the fact that the objectives and test data are accepted and being used by the adult

education community. Let's look at each of these four points in turn.

1) As various authors point out (Hunter & Harman, 1979; Kozol, 1980), the APL objectives are not based upon inputs from appropriate segments of society. For the great part, the objectives were not determined by the adult population, but by professors, administrators, social workers, supervisors, personnel managers, and bureaucrats from state and federal agencies who believed that they knew what kinds of skills and knowledge are necessary for all people in contemporary society. But as Hunter and Harman (1979) contend, effective functioning in one's own cultural group can only be determined by the individual or the group. The APL authors seem to think that there is some homogeneous culture called the "United States culture." They ignore the fact that our nation is composed of a tremendous number of cultures and sub-cultures, each with its own functions and uses of literacy. Of course, many of these functions and uses do overlap from one sub-culture to another, but they do not do so necessarily. Moreover, as Hunter and Harman (1979) and Newman (1980) observe, the APL objectives ignore such things as the stimulation of the imagination, the undertaking of change in oneself and in one's society, and "things of the spirit." As Newman says, the APL objectives and performance data are defined by a single set of researchers at a particular point in time. To assert that this single set of researchers is able to specify what all Americans in all groups or sub-cultures in the United States must be able to do to be labelled functionally competent is highly suspect.

2) The "performance indicators" which supposedly "reflect requirements taken from adult life" are "small simulations of what is demanded of the adult

by his or her society...." Once again, as in point 1 discussed above, the APL authors seem to believe that the same things are demanded of all adults in all daily situations. Moreover, the performance indicators were actually field tested with 3,500 adults who were enrolled in Adult Basic Education (ABE) programs in 30 states. This sample of "undereducated and underemployed" adults is itself biased; for as Hunter and Harman (1979) point out, the ABE target population is 60 million adults (who have not completed high school), but ABE programs serve only 1.7 to 3 million of these adults--over one-third of wnom drop out of the programs. Thus, the ABE population is not representative of "undereducation and underemployed" adults. Since, as Hunter and Harman observe, the ABE program is a "creaming operation" which generally serves those adults most in tune with middle-class norms (most in tune with the norms held by the APL researchers), it clearly reflects the goals, needs, skills, and aspirations of those adults who buy into the American Dream and want to attain it through traditional educational agencies. It does not necessarily reflect the goals, needs, skills, and aspirations of those adults who do not buy into traditional middle-class goals.

3) If there are problems with the representativeness of the population upon which the performance indicators were field tested, there are even greater problems with the national assessment. The performance indicators were "formatted into a series of research schedules" for the national survey; five independent samples were then drawn (for a total of 7,500 adults) and the national survey conducted. As Guthrie (1983) observes, however, there is in general an unawareness on the part of the general public of its actual uses of literacy. Thus, responses to an interview do not adequately sample how people

actually use reading and writing in their own community on a daily basis. Heath (1980) for example, shows clearly that a group of people may be labelled functionally incompetent according to some survey which is based on a middle-class or school notion of competency, but be, in fact, quite competent according to the functions and uses of literacy required by their particular community.

4) The APL authors base their argument for validity primarily on the "degree of use to which the objectives and test data will be put" (Northcutt, 1975, p. 10). Internal and external validity, as even the most beginning student of research and evaluation knows, do not rest upon acceptance and degree of use of a test, set of objectives, and so forth. A variety of things, such as testing, instrumentation, selection and reactive effects of experimental procedures, contribute to internal and external validity. Until relatively recently, handicapped children were locked out of public schools. The "degree of use" of such things as tests and educational objectives did not make such practice any more valid than any actual practice makes anything valid.

The APL authors maintain rightly that reliability "is a function not only of the format and content of the interview itwself, but of the sampling design and field procedures" (Northcutt, 1975, p. 10). The authors admit a test-retest design was not used because it would have been too costly for a national sample. Cervero (1980) concludes in his lengthy statistical reanalysis of the original APL data that the APL test and objectives are not valid or reliable across all sectors of society.

More importantly, the reliability of the APL findings must be questioned on the very basic assumptions made by the APL researchers. They state that their theory of functional competency is based in part on the premise that a "person is functionally competent only to the extent that he or she can meet

the requirements which are extant at a given point in time" (Northcutt, 1975, p. 2). They assume, however, that the same requirements are extant for all people in the United States: they make no distinction among, for example, geographical regions, social contexts, and community standards. Thus, the APL researchers believe that their findings are reliable because they can consistently measure competency across all people in the United States, regardless of geographical regions, and so forth.

Linguists, cultural anthropologists, and adult education researchers have shown that the functions and uses of language are tied to social contexts. The research of Philips (1975) and Labov (1969), for example, has shown that there is a diversity of codes and speech styles which depend, in part, on particular social contexts. Heath's (1981) research demonstrates that one must examine the functions and actual uses of literacy within the social context of a particular cultural community. Finally, Szwed (1981) says that there exists a "plurality of literacies," many of which are quite different from the abstract, generalized notions of literacy that are based on middle-class values and perceptions. He maintains that we must examine over long periods of time the social meaning of literacy in particular social contexts.

Ultimately, the validity and reliability of the APL tests and data are suspect because the APL authors fail to address the kinds of issues that Bormuth (1973-74) explores. Bormuth, after examining various conceptions of literacy, the nature of literacy, the kinds of behaviors involved in literacy, the measurement of literacy behaviors, and the testing of literacy behaviors, concludes that one can be regarded as literate when one can "perform well enough to obtain the maximum value" from the materials that one

needs to read (Bormuth, 1973-74, p. 65). And this is precisely the issue that the APL authors fail to address adequately: what materials does a specific individual in a specific context need to read, and of what does "maximum value" consist for that specific individual in that specific temporal and physical context? All people do not face the same problems, and all people do not solve the same problems in the same way.

Political and Social Objections to APL

Various authors have criticized the APL project on the basis of political and social grounds. Levine (1982) argues that the APL notion of competency is based upon "crude empiricism and political crassness." He continues, "It appears that functional competence has been defined so that it is merely sufficient to bring its possessor within the reach of bureaucratic modes of communication and authority" (Levine, 1982, p. 261). Moreover, this "crude empiricism" results in a notion of competency that is mathematically related to success, and success in life is based upon three simple, quantitative measures: income, years of schooling, and status of occupation.

The APL project thus accepts and advocates a simplistic materialism as the driving force of people, society, and education, and utterly ignores the qualitative, affective, spiritual, imaginative, and self-renewing abilities of people and society which are ultimate parts of our democratic heritage. One can trace these non-materialistic abilities and forces from the Declaration of Independence, to the Civil Rights movement in the 1950's and 1960's, to the Brown vs. the Board of Education decision, to the reaffirmation of certain values and a reexamination of principles by many people and government officials during the Watergate affair and its aftermath. These are the issues which the

APL authors totally ignore. Thus, according to their standards, a prosperous, well-educated manufacturer who knowingly pollutes the environment and endangers the lives of her employees will be considered more successful than someone like, for example, Mother Theresa of India who according to APL standards will be placed in APL 1 category. Likewise, the wealthy mayor of a southern town in Alabama who was also the leader of the local Ku Klux Klan during the Civil Rights movement in the 1950's would also be considered more successful than Rosa Parks.

By failing to deal with the moral and ethical aspects of adult literacy--indeed, by ignoring such aspects--and by attempting to describe a value-neutral situation, the APL authors actually prescribe a form of literacy education which is designed to bolster and perpetuate the status quo. This sort of supposedly objective and value-neutral literacy training, as Paul Goodman (1968) contends, teaches people how to be "personnel" and not "people":

> The "functional literacy" that is so much talked about has no relation to reading for truth, beauty, or citizenship but is entirely training to read directions and to be personnel. When there is no industry in which to be personnel, one becomes client-personnel of the professional-personnel. (Goodman, 1968, p. 133)

Nowhere do the APL authors mention what a person should do, how she should use reading and writing and other skills and knowledge, when she is exploited on the job or finds her workplace hazardous or racist or sexist; nowhere do they mention how or why one can or should question the actions of governmental officials or challenge unjust laws. Ultimately, the APL objectives are designed to develop a passive, accepting consumer--a "personnel" in Goodman's terms who is brought through literacy "within the reach of bureaucratic modes of communication and authority" (Levine, 1982, p. 261). Aronowitz (1981), Freire (1970), and Kozol (1980) all argue against such conceptions of literacy

and forms of literacy training which depower people instead of empowering them.

APL as a Form of Persuasive Discourse

Now I want to view APL from a quite different perspective; I want to look at APL as a particular type of discourse.

Kinneavy (1971) says that depending upon which aspect of the communication process is emphasized, there are four aims of discourse: 1) expressive; 2) referential; 3) literacy; 4) persuasive. I will briefly explain each of these aims in turn.

1) Expressive discourse involves uses of language as means of expressing some aspect of the personality of the encoder. This personality may either be that of an individual or a social group. For example, conversation, diaries, journals, and personal prayers express the personality of the individual; such things as constitutions, manifestos, myths, and religious credos express the personality of a social group.

2) Referential discourse involves the ability of language to "designate or reproduce reality, in a manner of speaking" (Kinneavy, 1971, p. 39). The focus is on reality. Referential discourse is of three general kinds: a) Exploratory discourse involves attempts to seek the nature of reality which is not known; such uses of language include questionnaires, interviews, seminars, dialogues, and diagnoses. b) Scientific discourse involves the systematization of information and accompanying demonstrative proofs of its validity; such uses of language include arguing from accepted premises, proving a point by generalizing from particulars, and a combination of both of these approaches. Typical scientific discourse includes most history, descriptive analyses, and taxonomic categories in the natural sciences.

c) Informative discourse involves the use of language to relay supposedly known facts to the decoder; such uses of language include news articles, reports, textbooks, weather reports, and so forth.

3) Literary discourse involves uses of language in which language calls attention to itself. The product or "text or work itself may be the focus of the process as an object worthy of being appreciated in its own right" (Kinneavy, 1971, p. 39). Such uses of language include short stories, poetry, songs, drama, movies, and jokes.

4) Persuasive discourse involves uses of language which focus primarily on the decoder. Persuasive discourse attempts to elicit from the decoder "a specific action or emotion or conviction" (Kinneavy, 1971, p. 211). Typical examples of persuasive discourse include advertising, sermons, political speeches, and editorials.

The APL project purports to be a form of referential discourse (scientific). The APL researchers report how they conducted their research, that is, how they systematized information, and present various arguments and proofs for the validity and reliability of their findings. Thus, they want the reader to believe that their report has the identifying characteristics of science and scientific discourse such as objectivity, logicality, and analyticity. As Kinneavy (1971) says:

> ... the descriptive, the narrative, the classificatory, and the evaluative statements of science must be continuously oriented to the reality under consideration. Science, for this reason, is often called "objective". It is "thing"-oriented, not person-oriented. (Kinneavy, 1971, p. 88)

The discourse of science is thus more objective and impersonal than other forms of discourse (exploratory and informative, for example) and is also

more probable than the other forms; that is, there are accompanying proofs of certainty or high probability which are absent or not as rigorous in the other forms of discourse. I want to maintain, however, that the APL project is not an example of scientific discourse, but instead is an example of persuasive discourse and should be judged as such.

Persuasive discourse, as noted above, is "primarily focused on the decoder and attempts to elicit from him a specific action or emotion or conviction" (Kinneavy, 1971, p. 211). Kinneavy, citing Aristotle, says that one basic technique of inducing belief is the "logical" argument. Such "logical" arguments have to do with "the 'plausible', with apparent proof and seeming logic...." (Kinneavy, 1971, p. 220). Thus, the "logical" argument of persuasive discourse is only seemingly rational. It does not consider all the facts relevant to the situation; rather, it may conceal some of the facts, minimize, or magnify others in order to elicit action, emotion, or conviction from the decoder.

A typical variation of the "logical" argument of persuasive discourse, says Kinneavy, is one which has two seemingly scientific features. First, an inductive generalization is made. This generalization is only probable, however, and does not have the kind of rigorous proof that is an identifying characteristic of true scientific discourse. Second, inferences are deduced from the induced generalization. Thus, Kinneavy says, the convincing power of this kind of "logical" argument "depends upon using the evidence of the past to prove the possibility and probability of the future. This is one of Aristotle's common topics, 'future fact' ..." (Kinneavy, 1971, p. 261). I believe that the APL project is in fact this type of "logical" argument of persuasive discourse.

The APL authors first induce a generalization about the nature of functional competency: "Functional competency is directly related in a mathematical sense to success in adult life. This is an operating assumption which underlies all APL research activities" (Northcutt, 1975, p. 3). And how did the APL researchers arrive at this generalization? "The APL project has drawn from a variety of educational, sociological, economic, and behavioral studies to analyze different criteria of success. (Northcutt, 1975, p.3). Thus, they are attmepting to provide scientific proof for their induced generalization. Their proof, however, is only probable, and not very probable at that. From all of the studies they analyzed, the APL authors tell us that they found only three criteria of success. They do not tell why or how they arrived at only these three: level of education; level of income; and status of occupation. There are indeed scores of other criteria of "success" that one can argue for after examining educational, sociological, economic, and behavioral studies and a variety of other sources which deal with people in the world. Indeed the limited nature of success as defined by the APL authors would be scorned or dismissed as inadequate by thinkers from Aristotle to Karl Marx. Thus, what the APL authors have done is to magnify certain facts and minimize others in their attempt to elicit action, emotion, and conviction from the reader.

After the APL authors induce their probable, and challengeable, generalization, they then proceed to deduce a large number of inferences from it, for example, the APL performance competencies and objectives. As the APL authors maintain:

> These results, and the objectives upon which they are based, can have profound implications for educational practice, and form a base of information and evidence which can be used to make different educational systems more responsive to the needs of both their clients and society. (Northcutt, 1975, p. 15)

Thus, they are employing Aristotle's "future fact": they are using evidence from the past (that is, "successful" people have high incomes, high levels of education, and high status jobs) to prove the possibility and probability of future events or states, that is, mastering all of the APL objectives will somehow make one or help one become "successful."

Why is is important to establish the fact that the APL project and its findings are examples of persuasive discourse and not referential (scientific) discourse? I believe that it is utterly important because of the uses to which the APL findings and suggestions are put. As discussed previously, educators, politicians, program planners, and funding agencies are ever-increasingly referring to the APL project as if it were THE truth about adult literacy and supported by impersonal and objective evidence, close analysis, and rigorous testing. They are unquesioningly accepting the APL findings and recommendations as proven fact sanctioned by SCIENCE and RESEARCH.

A Summation of Objections to APL

I believe (Kazemek, 1983) that the APL project not only presents a reductive view of functional competency, but also embodies a noxious view of the relationship between the individual and society. The APL project works against the development of citizens who are intelligent, critical, and responsible members of society--against the development of the free and powerful character that Dewey spoke of so strongly. Instead of helping people see and analyze their own way of being in the world and helping them move beyond their

own immediate situations, instead of acknowledging the fact that literacy education is a political act and a process of cultural action (Freire, 1978), the APL project attempts to "bring up" the illiterate adult to middle-class standards of acceptability by a transfer of information from the knowing teacher to the unknowing adult student.

If the APL project is a form of persuasive discourse and not scientific discourse, then one cannot use it to speak ex cathedra about adult literacy from a position of SCIENCE and RESEARCH. Instead, one must consider all the available facts concerning the complex nature of adult functional competency; and this is something that the APL project fails to do. I believe that the best way of considering all of the facts is by following the Pragmatic experiemntal approach to truth: 1) one acknowledges that truth is relative to the problematic situation; 2) one acknowledges the fact that ideas must be subjected to tests of experience; 3) one acknowledges that one must consider the values of all the persons involved in the pragmatic situation; 4) one then arrives at some tentative solution to the problem which best fits the situation, ideas, facts, and values (Mead, 1964). This Pragmatic approach, I argue strongly, is utterly different from that employed by the APL researchers; it is truly scientific in a manner that the APL research and its resultant programs are not. It is time for adult literacy researchers, program developers, instructors, and politicians to begin looking closely, scientifically, at the APL notion of functional competency.

References

Acland, H. "If Reading Scores Are Irrelevant, Do We Have Anything Better?" Educational Technology, 16 (July 1976), 25-29.

Aronowitz, Stanley. "Toward Redefining Literacy." Social Policy, 12 (October 1981), 53-55..

Bormuth, John R. "Reading Literacy: Its Definition and Assessment." Reading Research Quarterly, 9 (1973-74), 7-66.

Cervero, Ronald M. "Assessment in Adult Basic Education: A Comparison of the APL and GED Tests." Adult Education, 31 (Winter 1981), 67-84.

_____. "Does the Texas Adult Performance Level Test Measure Functional Competence?" Adult Education, 30 (Spring 1980), 152-65.

Cranney, A. Garr. "The Literature of Adult Reading: Selected References." Journal of Reading, 26 (January 1983), 323-31.

Freire, Paulo. Pedagogy in Processs: The Letters to Guinea-Bissau. New York: The Seabury Press, 1978.

_____. Pedagogy of the Oppressed. New York: The Seabury Press, 1970.

Goodman, Paul. People or Personnel, and Like a Conquered Province. New York: Vintage Books, 1968.

Gray, William S. The Teaching of Reading and Writing; an International Survey. Paris: UNESCO, 1956.

Griffith, William S., and Cervero, Ronald M. "The Adult Performance Level Program: A Serious and Deliberate Examination." Adult Education, 27 (Summer 1977), 209-24.

Guthrie, John T. "Where Reading Is Not Reading." Journal of Reading, 26 (January 1983), 382-4.

Heath, Shirley Brice. "The Functions and Uses of Literacy." Journal of Communication, 30 (Winter 1980), 123-33.

_____. "Toward an Ethnohistory of Writing in American Education," in Marcia Farr Whiteman (Ed.), Writing: The Nature, Development, and Teaching of Written Communication. Volume I: Variation in Writing: Functional and Linguistic-Cultural Differences. ' Hillsdale, NJ: Lawrence Erlbaum Associates, 1981.

Hernon, Peter. "Flood Tide of Illiteracy Is Sweeping Space-Age America." St. Louis Globe-Democrat, January 8-9, 1983, 1B & 4B.

Hunter, Carman St. John, and Harman, David. Adult Illiteracy in the United States: A Report to the Ford Foundation. New York: McGraw-Hill, 1979.

Kazemek, Francis E. "Toward A Theoretical Framework of Adult Literacy." Ph.D. dissertation, Southern Illinois University, 1983.

Kinneavy, James L. A Theory of Discourse. New York: W.W. Norton & Co., 1971.

Kirsch, Irwin, and Guthrie, John T. "The Concept and Measurement of Functional Literacy." Reading Research Quarterly, 12 (1977-78), 485-507.

Kozol, Jonathan. Prisoners of Silence; Breaking the Bonds of Adult Illiteracy in the United States. New York: Continuum, 1980.

Labov, William. "The Logic of Nonstandard English," in James E. Alatis (Ed.), Monograph Series on Language and Linguistics, No. 22. Washington, D.C.: Georgetown University Press, 1969.

Levine, Kenneth. "Functional Literacy: Fond Illusions and False Economies." Harvard Educational Review, 52 (August 1982), 249-66.

Mead, George Herbert. Selected Writings. Edited by Andrew J. Reck. Indianapolis, IN: Bobbs-Merrill Co., Inc., 1964.

National Diffusion Network, Department of Education. Educational Programs that Work. San Francisco: Far West Laboratory, 1981.

Newman, Anabel P. Adult basic Education: Reading. Boston: Allyn and Bacon, Inc., 1980.

Northcutt, Norvell. Adult Functional Competency: A Summary. Austin, Texas: The University of Texas, 1975.

_____. APL Scope and Sequence Charts. Austin, Texas: The University of Texas, 1976.

Philips, Susan U. "Literacy as a Mode of Communication on the Warm Springs Indian Reservation," in Eric H. Lenneberg and Elizabeth Lenneberg (Eds.), Foundations of Language Development, Vol. 2. New York: Academic Press, 1975.

Szwed, John F. "The Ethnography of Literacy," in Marcia Farr Whiteman (Ed.), Writing: The Nature, Development, and Teaching of Written Communication. Volume I: Variation in Writing: Functional and Linguistic-Cultural Differences. Hillsdale, NJ: Lawrence Erlbaum Associates, 1981.

Watkins, Beverly T. "Colleges Seek Ways to Help Adults Who Can't Read." The Chronicle of Higher Education, (December 8, 1982), 8 & 10.

Welborn, Stanley N. "Ahead: A Nation of Illiterates?" U.S. News & World Report, (May 17, 1982), 53-7.

oj